335 cubic-foot (9.5 m^3) chamber, auto-exhaust hydrocarbons, and up to ten-hour irradiation time[36] and

- The HEW study using a 335 cubic-foot (9.5 m^3) chamber, toluene and m-xylene, and 6-hour irradiations.[37]

Trijonis[38,39] has recently reviewed the results of these studies, as summarized in Table 6-2. As indicated in Table 6-2, the various chamber studies basically agree concerning the dependence of maximum NO_2 and average NO_2 on NO_x input. With other factors held constant, maximum NO_2 and average NO_2 tend to be proportional to initial NO_x. The minor deviations away from proportionality that sometimes occur tend to be in the direction of a slightly less than proportional relationship, i.e., a 50 percent reduction in NO_x input sometimes produces slightly less than a 50 percent reduction in NO_2.

There is less agreement among the chamber studies concerning the dependence of NO_2 on initial hydrocarbon concentrations. With respect to <u>maximum</u> NO_2, the Bureau of Mines study indicates essentially no dependence on hydrocarbons. However, two other studies suggest that hydrocarbon reductions decrease maximum NO_2 concentrations. The UNC results indicate that 50 percent hydrocarbon control tends to decrease maximum NO_2 by about 10 percent to 20 percent. The General Motors studies imply that 50 percent hydrocarbon control reduces maximum NO_2 by about 25 percent.